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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,635	05/15/2001	Jukka-Pekka Salmenkaita	4208-4012	8048
27123	7590	12/13/2004	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			ABEL JALIL, NEVEEN	
			ART UNIT	PAPER NUMBER
			2165	

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/854,635

Applicant(s)

SALMENKAITA ET AL.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-26, 36-55, 57-58, 60-62 is/are allowed.
- 6) ☒ Claim(s) 27-35, 56 and 59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/1/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23-September-2004 has been entered.
2. The amendment filed on 23-September-2004 has been received and entered. Claims 1-62 are now pending.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 27-35, 56, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robarts et al. (U.S. Pub. No. 2002/0083025 A1) in view of Moore et al. (U.S. Pub. No. 2001/0039546 A1), and further in view of Brunk et al. (U.S. Pub. No. 2002/0126872 A1).

As to claim 27, Robarts et al. discloses a business method to enable a wireless device to provide recommendations to its user that are appropriate to the device's current environment (See Robarts et al. page 22, paragraph 0200), comprising:

characterizing a current environment of the wireless device with a current context result (See Robarts et al. page 3, paragraphs 0051-0052, also see Robarts et al. pages 2-3, paragraphs 0044);

forming a context-activity pair by selecting an activity and pairing it with the current context result (See Robarts et al. page 21, paragraphs 0193-0197, also see Robarts et al. page 1, paragraph 0005);

accessing a database of recommendations using the context-activity pair without including any user personal data (See Robarts et al. page 22, paragraph 0200, wherein "without including any user personal" reads on "device itself"); and

providing recommendations to the wireless device from the database (See Robarts et al. page 19, paragraph 0182, also see Robarts et al. pages 23-24, paragraph 0211).

Robarts et al. does not teach a metadata vector which represents the current sensor signals.

Moore et al. teaches a metadata vector which represents the current sensor signals (See Moore et al. page 4, paragraphs 0048-0049).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robarts et al. to include a metadata vector which represents the current sensor signals.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robarts et al. by the teaching of Moore et al. to include a metadata vector which represents the current sensor signals because it facilitate rapid retrieval of objects stored in the database.

Robarts et al. as modified still does not teach appending a message authentication code and digital signature to insure the integrity of the metadata vector.

Brunk et al. teaches appending a message authentication code and digital signature to insure the integrity of the metadata vector (See Brunk et al. pages 2-3, paragraphs 0027-0028).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robarts et al. to include appending a message authentication code and digital signature to insure the integrity of the metadata vector.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Robarts et al. by the teaching of Brunk et al. to include appending a message authentication code and digital signature to insure the integrity of the metadata vector because it provides copyrights and security of data.

As to claim 28, Robarts et al. as modified discloses which further comprises:

gathering the new recommendations and adding them to the database without including any user personal data (See Robarts et al. page 6, paragraph 0066, and see Robarts et al. page 22, paragraph 200, also see Robarts et al. pages 22-23, paragraphs 0204-0206).

As to claim 29, Robarts et al. as modified discloses which further comprises:

compiling statistical usage information about the recommendations and storing the usage information in the database (See Robarts et al. pages 23-24, paragraph 0211, also see Robarts et al. page 26, paragraph 0227, and see Robarts et al. page 29, paragraph 0259).

As to claim 30, Robarts et al. as modified discloses which further comprises:  
providing the statistical usage information to the wireless device accompanying the recommendations (See Robarts et al. page 13, paragraph 0118).

As to claim 31, Robarts et al. as modified discloses which further comprises:  
filtering the recommendations received at the wireless device by using the statistical usage information accompanying the recommendations (See Robarts et al. page 6, paragraph 0069, also see Robarts et al. page 33, paragraph 0316, and see Robarts et al. page 13, paragraph 0118).

As to claim 32, Robarts et al. as modified discloses wherein said providing step further comprises:

accessing a history log of previous recommendations provided to the user (See Robarts et al. page 32, paragraph 0301, also see Robarts et al. page 32, paragraph 0312);

filtering new recommendations from the previous recommendations and providing the new recommendations to the user (See Robarts et al. page 6, paragraph 0069, also see Robarts et al. page 33, paragraph 0316).

As to claim 33, Robarts et al. as modified discloses wherein said providing step further comprises:

accessing a history log of previous recommendations provided to the user (See Robarts et al. page 32, paragraph 0301, also see Robarts et al. page 32, paragraph 0312), including ratings of the previous recommendations (See Robarts et al. page 31, paragraphs 0275-0276);

filtering recommendations using the ratings and providing the filtered recommendations to the user (See Robarts et al. page 31, paragraphs 0275-0276).

As to claim 34, Robarts et al. as modified discloses which further comprises:

providing the recommendations to an application program (See Robarts et al. pages 6-7, paragraphs 0074-0077, also see Robarts et al. page 4, paragraph 0057).

As to claim 35, Robarts et al. as modified discloses which further comprises:

providing at least portions of the database to a third party service provider (See Robarts et al. page 13, paragraph 0118, also see Robarts et al. page 23, paragraph 0211, and see Robarts et al. page 26, paragraph 0227, and Robarts et al. page 29, paragraph 0259).

As to claim 56, Robarts et al. as modified discloses further comprising:

forming a database of context-activity pairs and related service recommendations (See Robarts et al. page 21, paragraphs 0193-0197, also see Robarts et al. page 1, paragraph 0005);

controlling access of applications to private context information via a privacy control block (See Robarts et al. page 22, paragraph 0200, also see Robarts et al. page 23, paragraphs

0205-0206, and see Robarts et al. page 24, paragraphs 0211-0216, wherein “attempting to register” reads on “determine whether users are authorized to receive requested information”); and

alternative recommendations are provided to the wireless device from the database for the selection of a context- activity using a recommendation algorithm (See Robarts et al. page 29, paragraphs 0254-0256, wherein user preference learning “adaptive learning” algorithm is taught to provide further suggestions to the user, also see Robarts et al. page 28, paragraph 0247 indicates user recommendations based on patterns, and see Robarts et al. page 30, paragraph 265).

As to claim 59, Robarts et al. as modified discloses wherein at least one source of services matching the context-activity pair received from the wireless device (See Robarts et al. pages 15-16, paragraphs 0159-0160).

### ***Reasons for Allowance***

5. Claims 1-26, 36-55, 57-58, and 60-62 are allowed over the prior art made of record.

6. The following is a statement of reasons for allowance:

The prior art of record (Robarts et al. -U.S. Pub. No. 2002/0083025 A1- and- Moore et al. -U.S Pub. No. 2001/0039546 A1-and- Brunk et al. -U.S. Pub. No. 2002/0126872 A1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), searching a database of recommendations using the context-activity pair without user

identification wherein the database comprises a table listing context-activity pairs each related to (i) a listing of service recommendations and (ii) a listing of number times recommended for each service recommendation, as claimed in claims 1, 22, and 36.

Claims 2-21, 52, 60-62, 23-24, 53, 37-45, 57 are allowed over the prior art made of record, because they are dependent from the allowed independent claims 1, 22, and 36, respectively.

The prior art of record (Robarts et al. -U.S. Pub. No. 2002/0083025 A1- and- Moore et al. -U.S. Pub. No. 2001/0039546 A1-and- Brunk et al. -U.S. Pub. No. 2002/0126872 A1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), sensor signals as a metadata vector which represents the current sensor signals; searching a database of recommendations using the context-activity pair without user identification wherein the database comprises a table listing context-activity pairs each related to (i) a listing of service recommendations and (ii) a listing of number times recommended for each service recommendation, as claimed in claims 25, and 46.

The prior art of record (Robarts et al. -U.S. Pub. No. 2002/0083025 A1- and- Moore et al. -U.S. Pub. No. 2001/0039546 A1-and- Brunk et al. -U.S. Pub. No. 2002/0126872 A1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), sensor signals as a metadata vector which represents the current sensor signals; appending a message authentication code and digital signature to insure the integrity of the

metadata vector; searching a database of recommendations using the context-activity pair without user identification wherein the database comprises a table listing context-activity pairs each related to (i) a listing of service recommendations and (ii) a listing of number times recommended for each service recommendation, as claimed in claims 26, and 51.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-62 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 571-272-4038. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Neveen Abel-Jalil  
December 9, 2004

*C. Rones*  
**CHARLES RONES**  
**PRIMARY EXAMINER**